



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/840,031   | 04/24/2001  | Hitoshi Matsui       | 043034/0168         | 4261             |
| 22428  | 7590        | 03/15/2005           | EXAMINER            |                  |
| FOLEY AND LARDNER<br>SUITE 500<br>3000 K STREET NW<br>WASHINGTON, DC 20007 |             |                      | PHAN, TAM T         |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2144                |                  |

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/840,031

Applicant(s)

MATSUI, HITOSHI

Examiner

Tam (Jenny) Phan

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. This application has been examined. Amendment received 11/15/2004 has been entered. Claims 4, 8, and 11 are cancelled. Claims 1 and 7 are presently amended. Claims 12-13 are newly added.
2. Claims 1-3, 5-7, 9-10, and 12-13 are presented for examination.

***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
4. The effective filing date for the subject matter defined in the pending claims in this application is 04/24/2001.
5. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a translation of the foreign application should be submitted under 37 CFR 1.55 in reply to this action.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 5-7, 9-10, and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita (U.S. Patent Number 5,885,085) in view of Kolls et al. (U.S. Patent Number 6,615,186), hereinafter referred to as Kolls.

Art Unit: 2144

8. Regarding claim 1, Fujita disclosed a system comprising a parking lot having a plurality of parking spaces arranged therein: a plurality of communication devices installed in respective ones of the plurality of parking spaces, wherein each of the communication devices is allowed to communicate with a user terminal provided in a car parked in a corresponding parking space; and a switching device connected to the communication devices (Figures 1-2, column 1 lines 6-16, column 3 lines 21-39, lines 51-57, column 9 lines 50-55), wherein each of the plurality of communication devices is provided with a directional antenna directed to the car to allow wireless communication using a small-power or weak radio wave (Figures 1-2, column 1 lines 53-65, column 3 lines 51-57, column 7 lines 48-60, column 9 lines 50-55).

9. Fujita taught the invention substantially as claimed. However, Fujita did not expressly teach a switching device that allows the user terminal to be connected to the Internet in response to an Internet connection request received from the user terminal.

10. Fujita suggested exploration of art and/or provided a reason to modify the parking lot system with a switching device that allows the user terminal to be connected to the Internet in response to an Internet connection request received from the user terminal (Figure 6, column 7 lines 48-60, column 9 lines 50-55).

11. Kolls disclosed a switching device allows the user terminal to be connected to the Internet in response to an Internet connection request received from the user terminal (Figure 2C, Figure 11 sign 1002, column 4 lines 12-19, column 8 lines 41-52).

12. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Fujita with the teachings of Kolls to include a switching device that allows the user terminal to be connected to the Internet in response to an Internet

connection request received from the user terminal in order to conduct e-business services while inside a vehicle since in-vehicle device could access or be accessed by an Internet server to effectuate numerous forms and types of e-commerce and e-business (Kolls, column 6 lines 8-17).

13. Regarding claim 2, Kolls disclosed a system wherein the switching device is connected to the Internet through a high-speed data communication line (Figure 2C, column 28 lines 29-34).

14. Regarding claim 3, Kolls disclosed a system wherein the switching device is connected to a network system provided in a store, wherein the network system is connected to the Internet through a high-speed data communication line (Figure 2C, column 8 lines 41-52, column 28 lines 29-34).

15. Regarding claim 5, Fujita disclosed a system wherein the parking lot is an open-air parking lot, wherein each of the plurality of communication devices is provided at a tip of a pole having a predetermined height (Figures 1-2, column 3 lines 51-57).

16. Regarding claim 6, Fujita and Kolls disclosed a system wherein the parking lot is an indoor parking lot, wherein each of the plurality of communication devices is provided on a ceiling of the indoor parking lot (Fujita, Figure 2 sign 10, column 7 lines 15-24, Kolls, Figure 1C, column 6 lines 23-26, column 8 lines 41-52).

17. Regarding claim 7, Fujita and Kolls combined disclose a method for connecting a user terminal to the Internet, comprising the steps of: a) preparing a parking lot having a plurality of parking spaces arranged therein; b) preparing a plurality of communication devices installed in respective ones of the plurality of parking spaces, wherein each of the communication devices is allowed to communicate with a user terminal provided in a car

Art Unit: 2144

parked in a corresponding parking space: c) receiving an Internet connection request from the user terminal provided in the car parked in the corresponding parking space Fujita, Figures 1-2, column 1 lines 6-16, column 3 lines 21-39, lines 51-57, column 9 lines 50-55; and d) connecting the user terminal to the Internet depending on the Internet connection request (Kolls, Figures 1B, 1I, 1K-1M, 2A-2C, 10, column 4 lines 12-19, column 5 line 60-column 6 line 7, column 8 lines 41-52), wherein the Internet connection request includes an identification number that has been uniquely assigned to a user of the user terminal, wherein the step d) comprises the steps of: determining whether the identification number is authenticated; when the identification number is authenticated, connecting the user terminal to the Internet (Kolls, Figure 21, column 8 lines 28-39, column 57 line 50-column 58 line 36).

18. Regarding claim 9, Kolls disclosed a method wherein the plurality of communication devices are connected to the Internet through a high-speed data communication line (Figure 2C, column 28 lines 29-34).

19. Regarding claim 10, Kolls disclosed a method wherein the plurality of communication devices are connected to a network system provided in a store, wherein the network system is connected to the Internet through a high-speed data communication line (Figure 2C, column 8 lines 41-52, column 28 lines 29-34).

20. Regarding claim 12, Fujita disclosed a system wherein the switching device communicates with a particular one of the communication devices in a wireless manner using a specifically assigned frequency [FM radio frequency, VHF band frequency] (column 4 lines 17-23, lines 35-41, column 6 lines 22-29).

21. Regarding claim 13, Fujita disclosed a system wherein a first one of the communication devices communicates with a corresponding user terminal disposed within a

Art Unit: 2144

first car parked in a corresponding parking space using signals of a first frequency, and wherein a second one of the communication devices communicates with a corresponding user terminal disposed within a second car parked in a corresponding parking space using signals of the first frequency (column 4 lines 17-23, lines 35-41, column 6 lines 22-29, column 7 line 63-column 7 line 8).

22. Since all the limitations of the claimed invention were disclosed by the combination of Fujita and Kolls, claims 1-3, 5-7, 9-10, and 12-13 are rejected.

### ***Response to Arguments***

23. Applicant's arguments filed 11/15/2004 have been fully considered but they are not persuasive.

24. In response to applicant's argument that "both the user terminal 102 and the wireless communication device 30 are allowed to reduce in size, price and power consumption", although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

25. In response to applicant's argument that "Fujita discloses a signal receiving section 7 and a signal transmitting section 8, which communicate with a command device 12 operated by a user inside a vehicle. As disclosed in column 4, lines 4-9 of Fujita, the signal receiving section receives commands as "infrared signals" as sent by the command device 12. As disclosed in column 4, lines 19-23 of Fujita, the signal transmitting section 8 sends karaoke signals to a car radio audio apparatus 41 in the passenger car 40", the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the

prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

26. In response to applicant's argument that "there is no disclosure or suggestion in Fujita that his signal transmitting section 8 and his signal receiving section 7 utilize directional antennas to communicate with devices within the vehicle parked in the parking space adjacent to those sections 7, 8", the Examiner respectfully disagreed. Although Fujita did disclosed "infrared signals" in one preferred embodiment, Fujita also disclosed "The transmitter/receiver tower 3 has a transmitter antenna 8 and a receiver antenna 9 mounted at the top of the tower 3, which are connected to the main karaoke apparatus 6. A signal receiving section 7 is provided above the transmitter/receiver tower 3 for receiving a signal emitted from the command device 12 that is operated by the user in the passenger car 40". Fujita further disclosed "The transmitter 33 frequency-modulates the mixed signal with a high frequency radio wave at an FM radio frequency and sends the frequency-modulated (FM) signal to the transmitter antenna 8 from which the FM signal is transmitted." Fujita also disclosed "When 'INTERNET' is selected from the menu, an Internet browser is activated and displayed on the display screen 4 so that the users in the car 40 can use the Internet from within the car 40. The Internet browser displayed on the display screen 4 is controlled by the wireless controller/command device 112". It should be obvious then that the user terminal device provided in a parked car and the communication devices communicates using the transmitter and receiver antennas. In addition, weak radio wave signals are widely used in wireless communications include those that were related to communication systems of parking structures. Please refer to PTO-892 for prior arts.



27. In response to applicant's argument that "While it is not argued that Figure 21 and column 57, line 50 to column 58, line 36 of Kolls describes the use of biometric data provided by the user within a vehicle in order to determine whether or not the user is allowed to access an Internet, this is not the same as the user providing an identification number in an Internet connection request (which is used to authenticate the user)", the Examiner respectfully disagreed. According to Microsoft Computer Dictionary, "biometrics relates to authentication and security techniques that rely on measure, individual biological stamps to recognize or verify and individual identity. Security schemes are generally categorized into three levels: level 1 relies on something the person carries, such as an ID badge with a photo or computer cardkey; level 2 relies on something the person knows such as password or a code number; and level 3, the highest level, relies on something that is party of the person's biological makeup or behavior". Thus, biometrics data are unique identification data that are used to authenticate and validate the user in an Internet connection request session.

28. In response to applicant's argument that the Office Action did not address the limitation "the parking lot is an indoor parking lot, wherein each of the plurality of communication devices is provided on a ceiling of the indoor parking lot" and "Fujita and Kolls both are directed to outdoor parking lots", it is submitted that Fujita disclosed "partitions or walls may be provided between two adjacent parking spaces. Also, a ceiling may be provided over the parking space", thus this should be obvious that the parking structure in Fujita could be an indoor parking lot with ceilings. In Figure 2, Fujita also disclosed a communication device mounted on top and above the parked vehicle. Thus, if a ceiling were provided over the parking space, the communication device would be mounted on a ceiling.

Art Unit: 2144

29. As the rejection reads, Examiner asserts that the combination of these teachings render the claimed invention obvious.

***Conclusion***

30. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Bodell (U.S. Patent Number 6,016,426) titled "Method and system for cellular communication with centralized control and signal processing" disclosed a cellular system includes wide band digital signal processing at a central office that is connected to one or more cellular sites by optical fiber cables. Data signals are exchanged between the cell sites and the central office using intensity modulated optical data signals. Control of call supervision and handling is consolidated in the central office to enable dynamic variation of wireless service reception and transmission capabilities at a cell site in response to changing demands for wireless

service. Each antenna at a cell site may receive and transmit an assigned RF bandwidth using any frequency within that band. *The individual radio frequency receivers and transmitters at a site are assigned specific frequencies that define the number of available active channel links at the site.* The operating frequencies of the receivers and transmitters are assigned in accordance with specific wireless protocols, which divide the cellular spectrum into blocks of channels to avoid the well-known problems of co-channel and adjacent channel interference among cell sites in a cellular system.

b. Honkasalo et al. (U.S. Patent Number 6,101,176) titled "Method and apparatus for operating an indoor CDMA telecommunications system" disclosed a method and apparatus is provided for the overlaid operation of two or more wireless communication systems where one of the two systems is a small-scale or indoor system and the other is a large-scale or outdoor system. The indoor system monitors the operation of the outdoor system and detects which part of the available radio resources are temporarily not in use or interference-free in the outdoor system. Interference due to the co-existence of large scale and small scale wireless communications networks in a common area could be addressed by assigning specific frequencies within the available band to the different networks, sacrificing portions of both networks' capacities in order to enable the overlap.

32. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

Art Unit: 2144

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William Cuchlinski  
SPE  
Art Unit 2144  
(571) 272-3925

tp  
March 7, 2005